PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q97384

Kenichi MARUHASHI, et al.

Appln. No.: 10/594,444

Group Art Unit: 2616

Confirmation No.: 6862

Examiner: Not yet assigned

Filed: September 26, 2006

For:

RADIO COMMUNICATION DEVICE

<u>INFORMATION DISCLOSURE STATEMENT</u> <u>UNDER 37 C.F.R. §§ 1.97 and 1.98</u>

MAIL STOP AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

- 1. Japanese Patent Laid-open Publication No. 2003-318999, published November 7, 2003 (with English-language Abstract).
- 2. Japanese Patent Laid-open Publication No. 05-335975, published December 17, 1993 (with English-language Abstract).
- 3. Japanese Patent Laid-open Publication No. 07-154376, published June 16, 1995 (with English-language Abstract).

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- 4. Japanese Patent Laid-open Publication No. 07-162350, published June 23, 1995 (with English-language Abstract).
- 5. Japanese Patent Laid-open Publication No. 08-084105, published March 26, 1996 (with English-language Abstract).
 - 6. Japanese Patent No. 3059058, issued April 21, 2000, with corresponding Japanese Patent Laid-open Publication No. 08-084105, published March 26, 1996.
- 7. Japanese Patent Laid-open Publication No. 08-139632, published May 31, 1996 (with English-language Abstract).
- 8. Japanese Patent Laid-open Publication No. 09-093158, published April 4, 1997 (with English-language Abstract).
 - 9. Japanese Patent No. 3014757, issued December 17, 1999.
- 10. Japanese Patent Laid-open Publication No. 07-030453, published January 31, 1995(with English-language Abstract).
- 11. Japanese Patent Laid-open Publication No. 09-219672, published August 19, 1997 (with English-language Abstract).
- 12. Japanese Patent No. 2736067, issued January 9, 1998, with corresponding Japanese Patent Laid-open Publication No. 01-220920, published September 4, 1989.
 - 13. Japanese Patent No. 3073767, issued June 2, 2000.
- 14. Japanese Patent No. 3407708, issued March 14, 2003, with corresponding Japanese Patent Laid-open Publication No. 2001-237853, published August 31, 2001.
- 15. International Application Publication No. WO 02/093779, published November 21, 2002.

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- 16. Yuanrun Teng et al., "Performance Analysis of SDM-OFDM System with Adaptive Modulation Method over MIMO Channels", the Institute of Electronics; IEICE Technical Report, Vol. 103 No. 66, May 23, 2003, pp. 75-82.
- 17. Sumaru Niida et al., "Adaptive Modulation Using Space-Time Block Code Matrix" KDDI R&D Laboratories Inc., March 6, 2002, pp. 31-35.
- 18. Masaki Hayashi et al., "Performance of IMT-200 TDD Mode Test Bet", Wireless Solution Laboratories, the Institute of Electronics; IEICE Technical Report, Vol. 101, No. 682, February 27, 2002.

One copy of each of the listed documents is submitted herewith.

The present Information Disclosure Statement is being filed: (1) No later than three months from the application's filing date; (2) Before the mailing date of the first Office Action on the merits (whichever is later); or (3) Before the mailing date of the first Office Action after filing a request for continued examination (RCE) under §1.114, and therefore, no Statement under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

In compliance with the concise explanation requirement under 37 C.F.R. § 1.98(a)(3) for foreign language documents, Applicant encloses herewith a copy of a Communication from a foreign patent office in a counterpart application citing such documents, together with an English-language version (if not already included) of at least that portion of the Communication indicating the degree of relevance found by the foreign patent office.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not

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waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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WASHINGTON OFFICE 23373 CUSTOMER NUMBER

Date: March 16, 2007

Complete if Known Substitute for Form 1449 A & B/PTO 10/594,444 **Application Number** Confirmation Number 6862 **INFORMATION DISCLOSURE** Filing Date September 26, 2006 STATEMENT BY APPLICANT First Named Inventor Kenichi MARUHASHI (use as many sheets as necessary) Art Unit 2616 Not yet assigned **Examiner Name** Q97384 Attorney Docket Number

		•	U.S. I	PATENT DOCUM	ENTS
Examiner Initials*	Cite No.1	Document Number		Publication Date	
		Number	Kind Code ² (if known)	MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
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		US			

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date	Name of Patentee or	
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)	MM-DD-YYYY	Applicant of Cited Document	Translation ⁶
		JP	2003-318999	Α	11/07-2003	MATSUSHITA ELECTRIC IND. CO. LTD.	Abstract
-		JP	05-335975	Α	12-17-1993	NEC CORP.	Abstract
	•	JP	07-154376	Α	06-16-1995	HITACHI LTD.	Abstract
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		JP	07-030453	A	01-31-1995	NIPPONDENSO CO. LTD.	Abstract
		JP	09-219672	Α	08-19-1997	NIPPON TELEGR & TELEPH CORP. <ntt></ntt>	Abstract
	,	JP	2736067	B2 ·	01-09-1998		
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i i		JP	3073767	B2	06-02-2000		
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		JP	2001-237853	A	08-31-2001	ATR ADAPTIVE COMMUNICATIONS RES LAB	Abstract
		wo	02/093779	A2	11-21-2002	QUALCOMM INCORPORATED	Abstract

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.			
		Yuanrun Teng et al., "Performance Analysis of SDM-OFDM System with Adaptive Modulation Method over MIMO Channels", the Institute of Electronics; IEICE Technical Report, Vol. 103 No. 66, May 23, 2003, pp. 75-82.			
		Sumaru Niida et al., "Adaptive Modulation Using Space-Time Block Code Matrix" KDDI R&D Laboratories Inc., March 6, 2002, pp. 31-35.			
		Masaki Hayashi et al., "Performance of IMT-200 TDD Mode Test Bet", Wireless Solution Laboratories, the Institute of Electronics; IEICE Technical Report, Vol. 101, No. 682, February 27, 2002.			
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Examiner Signature	_	Date Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.